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FOREST MANAGEMENT

MEMORANDUM OF EAST SIDE GLACIER PARK

LODGEPOLE PINE EXAMINATION

Following considerable correspondence during the winter between the Bureau of Entomology and the Park Service, four areas of reported Dendroctonus monticolae infestation in lodgepole pine were examined during the first week in May by the writer to determine the advisability of control. The results of the examination indicated that the estimates submitted by the Park Service were far above the actual number of infested trees present. In explanation it is believed that during the survey conducted by the Park Service, the sample strips were run in the more mature spots of lodgepole pine and the data secured applied to too large an acreage. It is also thought that sometimes abandoned trees, or trees with a few pitched-out attacks were counted as "bug trees." The combination of these two errors would cause a highly inflated estimate.

None of the areas examined, with the exception of Park Creek, had more than what would be termed a normal infestation. In the upper Sherburne Lake area there is probably less than one-half section of mature lodgepole timber. The 1933 survey data records several new attacks as found on the sample strips. However, during the present examination only a very few abandoned "red-top"trees were located. The attacks in these "red-tops" had been either very light or one sided only, and the brood development had been very light as indicated by the lack of pupal chambers at the end of the larval mines. The lodgepole stands along the south shore of Sherburne Lake were examined with glasses from across the lake, but no "red-tops" other than an occasional tree were seen.

copy for Regional Forester (attention Mr. Koch)

It is estimated that there are about 3½ sections of mature lodgepole pine in the Belly River drainage. This timber lies in small patches about as follows: North side of Crossley Lake, ¼ section; Glenn's Lake, 1⅛ sections; a long narrow strip between the Belly River Ranger Station and Dawn Mist Falls, ¾ sections; Elizabeth Lake, 1 section. The examination was made along the north shore of Crossley and Glenn's Lake where the heaviest infestation had been reported. Ten newly attacked trees were found, one group of seven and a group of three. The brood in all of these trees was dead even below the snow line. No live brood whatever was found, but the cause of death is not known. The district ranger reports that the temperature reached 26° below zero one night, but it is doubtful if that was the cause of death because the snow would have protected the brood lying below it. More "red-tops" were seen than new attacks and it is thought that what little infestation existed there is on the decline.

A brief examination was made along the road and a trail above the Sun Camp Ranger Station on upper St. Mary's Lake. Between 25 and 30 faded lodgepole were examined and only one showed evidence of mountain pine beetle attack. It had been attacked on one side and, as in the Belly River area, the brood was dead.

On the way from Glacier Park Station to Belton, an all-night stop was made and the following forenoon the Park Creek infestation where 27,000 trees had been reported as being infested was examined. Park Ranger Miller, who had made the estimate, was present and pointed out the area of heaviest infestation. There has been a very serious condition on this flat for two or three years and a large number of trees have

been attacked. However, there is only about 1½ section of timber which extends along the north shore of the river. About 50 infested trees were examined and only four successful 1933 attacks were found. The brood in these trees was alive and seemed to be developing normally. The other trees were practically all pitched out; egg galleries had been constructed but were so badly lined with pitch that no brood development had taken place. Other trees showed evidence of two years' attacks and there were numerous old "red-tops." Mr. Miller, who frankly admits lack of experience in making surveys of this type, stated that while running his sample strips he counted every tree that showed a pitch tube. This would include all of the older attacks as well as the hundreds of pitched-out attacks, and one can easily see how such an estimate could be made. It is doubtful if more than 200 successful 1933 attacks could be found in the area and as the infestation is showing a sharp decrease, it is probably best left alone.

Respectfully submitted,

T. T. Terrell
Assistant Scientific Aid

It is realized that this examination was very extensive and that more serious situations may exist than recorded. Though no further action is necessary this spring, it is recommended that a thorough survey of the east side of Glacier Park, as well as a check-up on the west side infestations, be made this fall. The writer has agreed to assume leadership of this survey, the personnel of the crew being provided by the Park Service.

Approved:

James C. Evenden
Entomologist